CIVIL AVIATION AUTHORITY OF FIJI

STANDARDS DOCUMENT

Appendix 4
Obstacle Restriction and Removal

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OBSTACLE RESTRICTION AND REMOVAL

1.0 INTRODUCTION

1.1 This appendix expands on the requirements of SD-AD chapter 3 pertaining to obstacles and hazards.

1.2 The objectives of the specifications in this appendix are to define the airspace around aerodromes to be maintained free from obstacles so as to permit the intended aeroplane operations at the aerodromes to be conducted safely and to prevent the aerodromes from becoming unusable by the growth of obstacles around the aerodromes. This is achieved by establishing a series of obstacle limitation surfaces that define the limits to which objects may project into the airspace.

1.3 Objects which penetrate the obstacle limitation surfaces contained in this appendix may in certain circumstances cause an increase in the obstacle clearance altitude/height for an instrument approach procedure or any associated visual circling procedure or have other operational impact on flight procedure design. Criteria for flight procedure design are contained in the SD – Instrument Flight Procedures. Additional information is contained in the ICAO Procedures for Air Navigation Services - Aircraft Operations (PANS-OPS, Doc 8168).

1.4 The establishment of, and requirements for, an obstacle protection surface for visual approach slope indicator systems are specified in SD-AD – Appendix 5; Visual Aids for Navigation.

2.0 OBSTACLE LIMITATION SURFACES

2.1 Outer horizontal surface

2.1.1 Significant operational problems can arise from the erection of tall structures in the vicinity of airports. The operational implications fall broadly under the headings of safety and efficiency

2.1.1.1 *Safety implications;* any proposal to erect high masts or other skeletal structures in areas which would otherwise be suitable for use by aircraft on wide visual circuits, on arrival routes towards the airport or circuit, or on departure or missed approach climb- paths is reviewed carefully. Avoidance by marking or lighting cannot be relied upon in view of the relatively inconspicuous character of these structures, especially in conditions of reduced visibility, and notification of their existence will similarly not always guarantee avoidance.

2.1.1.2 *Efficiency implications*; if tall structures are erected in or near areas otherwise suitable for instrument approach procedures, increased procedure heights may need to be adopted, with consequent adverse effects on regularity and on the duration of the approach procedure, such as the denial of useful altitude allocations to aircraft in associated holding patterns. Such structures may furthermore limit desirable flexibility

for surveillance vectored initial approaches and the facility to turn en-route during the departure climb or missed approach.

2.1.2 Advance notice shall be provided to the Authority of any proposals to erect tall structures.

2.1.3 The Authority shall assess the aeronautical implications that such structures will have and take such action as required to protect aviation interests. In assessing the operational effect of proposed new construction, tall structures would not be of immediate significance if they are proposed to be located in:

a) an area already substantially obstructed by terrain or existing structures of equivalent height; and
b) an area which would be safety avoided by prescribed procedures associated with navigational guidance when appropriate.

2.1.4 For the purpose of paragraphs 2.1.2 and 2.1.3, the outer horizontal surface, tall structures considered to be of significance if they are both higher than 30 m above local ground level, and higher than 150 m above aerodrome elevation within a radius of 15,000m of the centre of the airport where the runway code number is 3 or 4.

2.1.5 This area of concern should be extended to coincide with the obstacle-accountable areas of PANS-OPS for the individual approach procedures at the airport under consideration.

2.2 Conical surface

2.2.1 Description; a surface sloping upwards and outwards from the periphery of the inner horizontal surface.

2.2.2 Characteristics; the limits of the conical surface shall comprise:
a) a lower edge coincident with the periphery of the inner horizontal surface; and
b) an upper edge located at a specified height above the inner horizontal surface.

2.2.3 The slope of the conical surface shall be measured in a vertical plane perpendicular to the periphery of the inner horizontal surface.

2.3 Inner horizontal surface

2.3.1 *Description;* a surface located in a horizontal plane above an aerodrome and its environs.

2.3.2 *Characteristics*; the radius or outer limits of the inner horizontal surface shall be measured from a reference point or points established for such purpose.

2.3.3 *Purpose;* to protect airspace for visual circling prior to landing, possibly after a descent through cloud aligned with a runway other than that in use for landing.

2.3.4 The height of the inner horizontal surface shall be measured above an elevation datum established for such purpose.

Note 1. — Guidance on determining the elevation datum is contained in the Airport Services Manual (Doc 9137), Part 6.

Note 2. — The shape of the inner horizontal surface need not necessarily be circular. Guidance on determining the extent of the inner horizontal surface is contained in the Airport Services Manual (Doc 9137), Part 6.

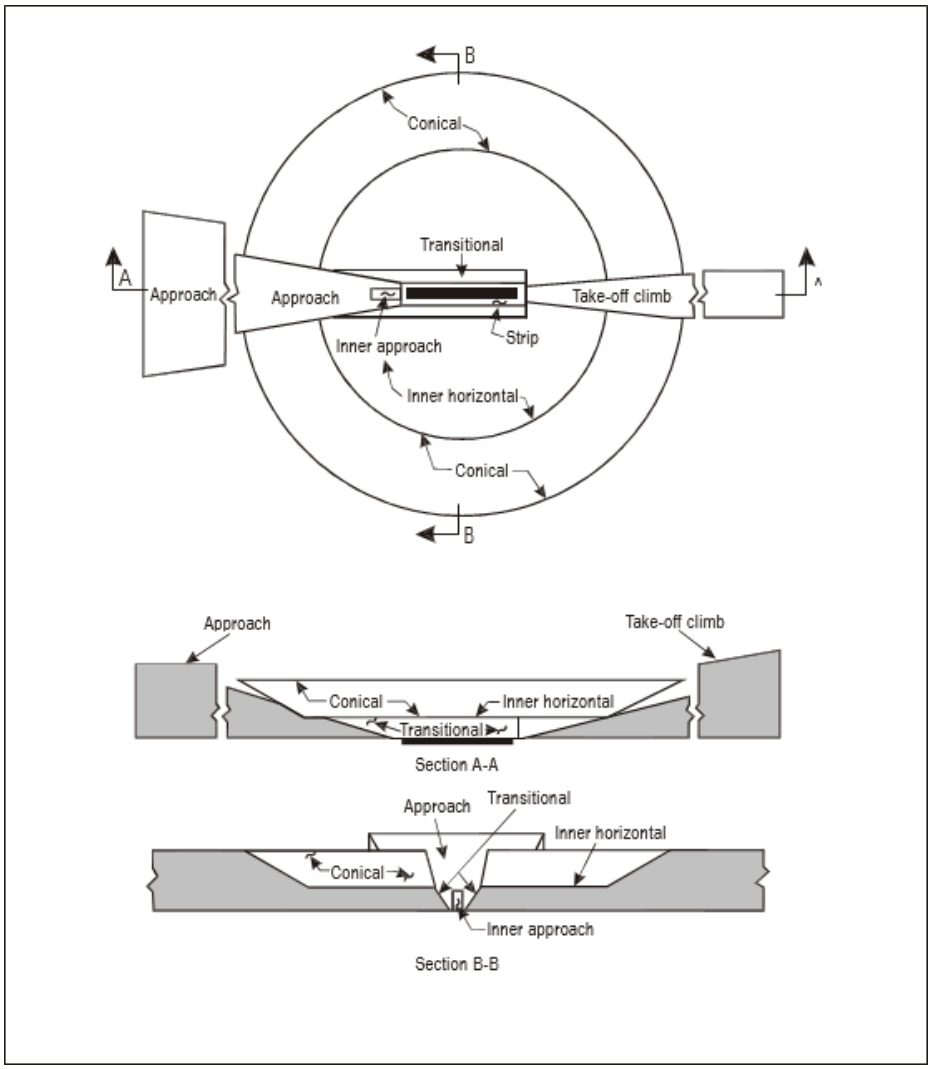

Figure 1 Obstacle Limitation Surfaces

2.4 Approach surface

2.4.1 *Description*; an inclined plane or combination of planes preceding the threshold.

2.4.2 *Characteristics*; the limits of the approach surface shall comprise:

a) an inner edge of specified length, horizontal and perpendicular to the extended centre line of the runway and located at a specified distance before the threshold;
b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the runway;
c) an outer edge parallel to the inner edge; and
d) the above surfaces shall be varied when lateral offset, offset or curved approaches are utilized, specifically, two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the extended centre line of the lateral offset, offset or curved ground track.

2.4.3 The elevation of the inner edge shall be equal to the elevation of the midpoint of the threshold.

2.4.4 The slope(s) of the approach surface shall be measured in the vertical plane containing the centre line of the runway and shall continue containing the centre line of any lateral offset or curved ground track.

Note. — See Figure 2.

2.5 Transitional surface

2.5.1 *Description*; a complex surface along the side of the strip and part of the side of the approach surface that slopes upwards and outwards to the inner horizontal surface.

2.5.2 *Characteristics*; the limits of a transitional surface shall comprise:

a) a lower edge beginning at the intersection of the side of the approach surface with the inner horizontal surface and extending down the side of the approach surface to the inner edge of the approach surface and from there along the length of the strip parallel to the runway centre line; and
b) an upper edge located in the plane of the inner horizontal surface.

2.5.3 The elevation of a point on the lower edge shall be:

a) along the side of the approach surface — equal to the elevation of the approach surface at that point; and
b) along the strip — equal to the elevation of the nearest point on the centre line of the runway or its extension.

Note. — As a result of b) the transitional surface along the strip will be curved if the runway profile is curved, or a plane if the runway profile is a straight line. The intersection of the transitional surface

with the inner horizontal surface will also be a curved or a straight line depending on the runway profile.

2.5.4 The slope of the transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.

2.6 Inner approach surface

2.6.1 *Description*; a rectangular portion of the approach surface immediately preceding the threshold.

2.6.2 *Characteristics*; the limits of the inner approach surface shall comprise:

(a) an inner edge coincident with the location of the inner edge of the approach surface but of its own specified length;
(b) two sides originating at the ends of the inner edge and extending parallel to the vertical plane containing the centre line of the runway; and
(c) an outer edge parallel to the inner edge.

2.7 Inner transitional surfaces

2.7.1 *Description*; a surface similar to the transitional surface but closer to the runway.

2.7.2 *Characteristics*; the limits of an inner transitional surface shall comprise:

(a) a lower edge beginning at the end of the inner approach surface and extending down the side of the inner approach surface to the inner edge of that surface, from there along the strip parallel to the runway centre line to the inner edge of the balked landing surface and from there up the side of the balked landing surface to the point where the side intersects the inner horizontal surface; and
(b) an upper edge located in the plane of the inner horizontal surface.

2.7.3 The elevation of a point on the lower edge shall be:

(a) along the side of the inner approach surface and balked landing surface — equal to the elevation of the particular surface at that point; and
(b) along the strip — equal to the elevation of the nearest point on the centre line of the runway or its extension.

Note. — As a result of b) the inner transitional surface along the strip will be curved if the runway profile is curved or a plane if the runway profile is a straight line. The intersection of the inner transitional surface with the inner horizontal surface will also be a curved or straight line depending on the runway profile.

2.7.4 The slope of the inner transitional surface shall be measured in a vertical plane at right angles to the centre line of the runway.

Note. — It is intended that the inner transitional surface be the controlling obstacle limitation surface for navigation aids, aircraft and other vehicles that must be near the runway and which is not to be penetrated except for frangible objects. The transitional surface described in 2.5.1 is intended to remain as the controlling obstacle limitation surface for buildings, etc.

2.8 Balked landing surface

2.8.1 *Description*; an inclined plane located at a specified distance after the threshold, extending between the inner transitional surface.

2.8.2 *Characteristics*; the limits of the balked landing surface shall comprise:

(a) an inner edge horizontal and perpendicular to the centre line of the runway and located at a specified distance after the threshold;
(b) two sides originating at the ends of the inner edge and diverging uniformly at a specified rate from the vertical plane containing the centre line of the runway; and
(c) an outer edge parallel to the inner edge and located in the plane of the inner horizontal surface.

2.8.3 The elevation of the inner edge shall be equal to the elevation of the runway centre line at the location of the inner edge.

2.8.4 The slope of the balked landing surface shall be measured in the vertical plane containing the centre line of the runway.

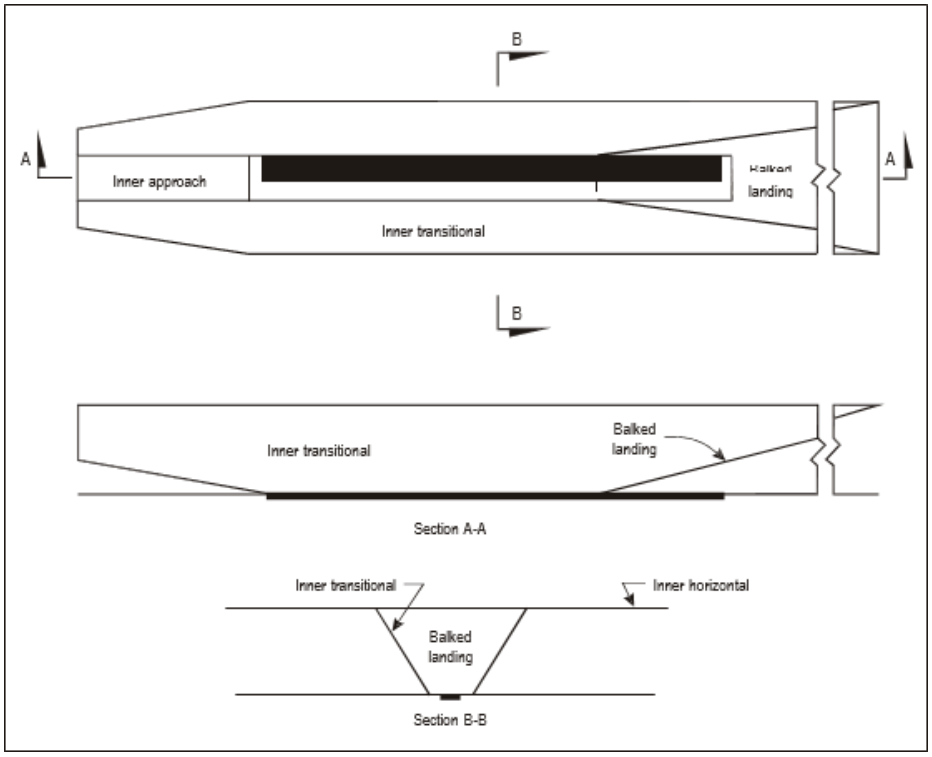

Figure 2 Inner approach, inner transitional and balked landing obstacle limitation surfaces

2.9 Take-off climb surface

2.9.1 A take-off climb surface shall be established for a runway meant for take-off:

2.9.2 New objects or extensions of existing objects shall not be permitted above a take-off climb surface except when the new object or extension would be shielded by an existing immovable object, or an aeronautical study determines that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

2.9.3 Description; an inclined plane or other specified surface beyond the end of a runway or clearway.

2.9.4 Characteristics; the limits of the take-off climb surface shall comprise:

(a) an inner edge horizontal and perpendicular to the centre line of the runway and located either at a specified distance beyond the end of the runway or at the end of the clearway when such is provided and its length exceeds the specified distance;
(b) two sides originating at the ends of the inner edge, diverging uniformly at a specified rate from the take-off track to a specified final width and continuing thereafter at that width for the remainder of the length of the take-off climb surface; and
(c) an outer edge horizontal and perpendicular to the specified take-off track.

2.9.5 The elevation of the inner edge shall be equal to the highest point on the extended runway centre line between the end of the runway and the inner edge, except that when a clearway is provided the elevation shall be equal to the highest point on the ground on the centre line of the clearway.

2.9.6 In the case of a straight take-off flight path, the slope of the take-off climb surface shall be measured in the vertical plane containing the centre line of the runway.

2.9.7 In the case of a take-off flight path involving a turn, the take-off climb surface shall be a complex surface containing the horizontal normals to its centre line, and the slope of the centre line shall be the same as that for a straight take-off flight path.

3.0 OBSTACLE LIMITATION REQUIREMENTS

The requirements for obstacle limitation surfaces are specified on the basis of the intended use of a runway, i.e. take-off or landing and type of approach, and are applied when such use is made of the runway. In cases where operations are conducted to or from both directions of a runway, then the function of certain surfaces may be nullified because of more stringent requirements of another lower surface.

3.1 Requirement for non-instrument runways

3.1.1 The following obstacle limitation surfaces shall be established for a non-instrument runway:

a) conical surface;
b) inner horizontal surface;
c) approach surface; and
d) transitional surfaces.

3.1.2 The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 1.

3.1.3 New objects or extensions of existing objects shall not be permitted above an approach or transitional surface except when, in the opinion of the Authority, the new object or extension would be shielded by an existing immovable object, or an aeronautical study determines that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

Note. — Circumstances in which the shielding principle may reasonably be applied are described in the Airport Services Manual (Doc 9137), Part 6.

3.1.4 New objects or extensions of existing objects should not be permitted above the conical surface or inner horizontal surface except when, in the opinion of the Authority, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

3.1.5 Existing objects above any of the surfaces required by 3.1.1 should as far as practicable be removed except when, in the opinion of the Authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

Note. — Because of transverse or longitudinal slopes on a strip, in certain cases the inner edge or portions of the inner edge of the approach surface may be below the corresponding elevation of the strip. It is not intended that the strip be graded to conform with the inner edge of the approach surface, nor is it intended that terrain or objects which are above the approach surface beyond the end of the strip, but below the level of the strip, be removed unless it is considered they may endanger aeroplanes.

3.1.6 In considering proposed construction, account should be taken of the possible future development of an instrument runway and consequent requirement for more stringent obstacle limitation surfaces.

3.2 Requirement for non-precision approach runways

3.2.1 The following obstacle limitation surfaces shall be established for a non-precision approach runway:

(a) conical surface;
(b) inner horizontal surface;
(c) approach surface; and
(d) transitional surfaces

3.2.2 The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 1, except in the case of the horizontal section of the approach surface (see 3.2.3).

3.2.3 The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects:

(a) a horizontal plane 150 m above the threshold elevation; or
(b) the horizontal plane passing through the top of any object that governs the obstacle clearance altitude/height (OCA/H);

whichever is the higher.

3.2.4 New objects or extensions of existing objects shall not be permitted above an approach surface within 3000m of the inner edge or above a transitional surface except when, in the opinion of the Authority, the new object or extension would be shielded by an existing immovable object, or an aeronautical study determines that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

3.2.5 New objects or extensions of existing objects should not be permitted above the approach surface beyond 3000m from the inner edge, the conical surface or inner horizontal surface except when, in the opinion of the Authority, the object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft.

3.2.6 Existing objects above any of the surfaces required by 3.2.1 should as far as practicable be removed except when, in the opinion of the Authority, the object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

Note. — Because of transverse or longitudinal slopes on a strip, in certain cases the inner edge or portions of the inner edge of the approach surface may be below the corresponding elevation of the strip. It is not intended that the strip be graded to conform with the inner edge of the approach surface, nor is it intended that terrain or objects which are above the approach surface beyond the end of the strip, but below the level of the strip, be removed unless it is considered they may endanger aeroplanes.

3.3 Requirement for precision approach runways

Note 1. — Refer to SD-AD appendix 9 for information regarding siting of equipment and installations on operational areas.

Note 2. — Guidance on obstacle limitation surfaces for precision approach runways is given in the Airport Services Manual (Doc 9137), Part 6.

3.3.1 The following obstacle limitation surfaces shall be established for a precision approach runway category I:

(a) conical surface;
(b) inner horizontal surface;
(c) approach surface; and
(d) transitional surfaces.

3.3.2 Where practicable the following obstacle limitation surfaces should be established for a precision approach runway category I:

(a) inner approach surface;
(b) inner transitional surfaces; and
(c) balked landing surface.

3.3.3 The following obstacle limitation surfaces shall be established for a precision approach runway category II or III:
(a) conical surface;
(b) inner horizontal surface;
(c) approach surface and inner approach surface;
(d) transitional surfaces;
(e) inner transitional surfaces; and
(f) balked landing surface.

3.3.4 The heights and slopes of the surfaces shall not be greater than, and their other dimensions not less than, those specified in Table 1, except in the case of the horizontal section of the approach surface (see 3.3.5).

3.3.5 The approach surface shall be horizontal beyond the point at which the 2.5 per cent slope intersects:

(a) a horizontal plane 150 m above the threshold elevation; or
(b) the horizontal plane passing through the top of any object that governs the obstacle clearance limit; whichever is the higher.

3.3.6 Fixed objects shall not be permitted above the inner approach surface, the inner transitional surface or the balked landing surface, except for frangible objects which because of their function must be located on the strip. Mobile objects shall not be permitted above these surfaces during the use of the runway for landing.

3.3.7 New objects or extensions of existing objects shall not be permitted above an approach surface or a transitional surface except when, in the opinion of the Authority, the new object or extension would be shielded by an existing immovable object or an aeronautical study determines that the object would not adversely affect the safety or significantly affect the regularity of operations of aircraft

3.3.8 New objects or extensions of existing objects should not be permitted above the conical surface and the inner horizontal surface except when, in the opinion of the appropriate authority, an object would be shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

Table 1. Dimensions and slopes of obstacle limitation surfaces – Approach runways

APPROACH RUNWAYS

	RUNWAY CLASSIFICATION									
	Non-instrument Code Number				Non-precision approach Code Number			Precision Approach Category I Code number		II or III Code number
Surface and dimensions (1)	1 (2)	2 (3)	3 (4)	4 (5)	1,2 (6)	3 (7)	4 (8)	1,2 (9)	3,4 (10)	3,4 (11)
CONICAL										
Slope	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Height	35m	55m	75m	100m	60m	75m	100m	60m	100m	100m
INTER HORIZONTAL										
Height	45m	45m	45m	45m	45m	45m	45m	45m	45m	45m
Radius	2000m	2500m	4000m	4000m	3500m	4000m	4000m	3500m	4000m	4000m
INNER APPROACH										
Width	-	-	-	-	-	-	-	90m	120m[c]	120m[c]
Distance from threshold	-	-	-	-	-	-	-	60m	60m	60m
Length	-	-	-	-	-	-	-	900m	900m	900m
Slope								2.5%	2%	2%
APPROACH										
Length of inner edge	60m	80m	150m	150m	140m	280m	280m	140m	280m	280m
Distance from threshold	30m	60m	60m	60m	60m	60m	60m	60m	60m	60m
Divergence (each side)	10%	10%	10%	10%	15%	15%	15%	15%	15%	15%
First Section										
Length	1600m	2500m	3000m	3000m	2500m	3000m	3000m	3000m	3000m	3000m
Slope	5%	4%	3.33%	2.5%	3.33%	2%	2%	2.5%	2%	2%
Second section										
Length	-	-	-	-	-	3600m[b]	3600m[b]	12000m	3600m[b]	3600m[b]
Slope	-	-	-	-	-	2.5%	2.5%	3%	2.5%	2.5%
Horizontal Section										
Length	-	-	-	-	-	8400m[b]	84000m[b]	-	8400m[b]	8400m[b]
Total length	-	-	-	-	-	15000m	15000m	15000m	15000m	15000m
TRANSITIONAL										
Slope	20%	20%	14.3%	14.3%	20%	14.3%	14.3%	14.3%	14.3%	14.3%
INNER TRANSITIONAL										
Slope	-	-	-	-	-	-	-	40%	33.3%	33.3%
BALKED LANDING SURFACE										
Length of inner edge	-	-	-	-	-	-	-	90m	120m[c]	120m[c]
Distance from threshold	-	-	-	-	-	-	-	c	1800m[d]	1800m[d]
Divergence (each side)	-	-	-	-	-	-	-	10%	10%	10%
Slope	-	-	-	-	-	-	-	4%	3.33%	3.33%

a. All dimensions are measured horizontally unless specified otherwise
b. Variable length (see 3.2.3 or 3.3.5)
c. Distance to the end of strip
d. Or end of runway whichever is less
e. Where the code letter is F, the width is increased to 140m except for those aerodromes that accommodate code letter F aeroplanes equipped with digital avionics that provide steering commands to maintain an established track during the go-around manoeuvre. (Refer circular 301, 345 and Chapter 4 of the PANS-Aerodromes, Part I (Doc 9981) for further information.)

3.3.9 Existing objects above an approach surface, a transitional surface, the conical surface and inner horizontal surface should as far as practicable be removed except when, in the opinion of the appropriate authority, an object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

Note. — Because of transverse or longitudinal slopes on a strip, in certain cases the inner edge or portions of the inner edge of the approach surface may be below the corresponding elevation of the strip. It is not intended that the strip be graded to conform with the inner edge of the approach surface, nor is it intended that terrain or objects which are above the approach surface beyond the end of the strip, but below the level of the strip, be removed unless it is considered they may endanger aeroplanes.

3.4 Runways meant for take-off

3.4.1 A take-off climb surface shall be established for a runway meant for take-off.

3.4.2. The dimensions of the surface shall be not less than the dimensions specified in Table 2, except that a lesser length may be adopted for the take-off climb surface where such lesser length would be consistent with procedural measures adopted to govern the outward flight of aeroplanes.

3.4.3 The operational characteristics of aeroplanes for which the runway is intended should be examined to see if it is desirable to reduce the slope specified in Table 2 when critical operating conditions are to be catered to. If the specified slope is reduced, corresponding adjustment in the length of the take-off climb surface should be made so as to provide protection to a height of 300m.

Note. — When local conditions differ widely from sea level standard atmospheric conditions, it may be advisable for the slope specified in Table 2 to be reduced. The degree of this reduction depends on the divergence between local conditions and sea level standard atmospheric conditions, and on the performance characteristics and operational requirements of the aeroplanes for which the runway is intended.

3.4.4 New objects or extensions of existing objects shall not be permitted above a take-off climb surface except when, in the opinion of the appropriate authority, the new object or extension would be shielded by an existing immovable object.

3.4.5 Where practicable, if no object reaches the 2 per cent (1:50) take-off climb surface, new objects should be limited to preserve the existing obstacle free surface or a surface down to a slope of 1.6 per cent (1:62.5).

Table 2. Dimensions and slopes of obstacle limitation surfaces RUNWAYS MEANT FOR TAKEOFF			
Surface Dimensions[a] (1)	Code Number		
	1 (2)	2 (3)	3 or 4 (4)
TAKE-OFF AND CLIMB			
Length of inner edge	60m	80m	180m
Distance from runway end[b]	30m	60m	60m
Divergence (each side)	10%	10%	12.5%
Final width	380m	580m	1200m 1800m[c]
Length	1600m	2500m	15000m
Slope	5%	4%	2%[d]

a. All dimensions are measured horizontally unless specified otherwise
b. The take-off and climb surface starts at the end of the clearway if the clearway length exceeds the specified distance
c. 1800m when the intended track includes changes of heading greater than 15° for operations conducted in IMC, VMC by night.
d. See 3.4.3 and 3.4.5

3.4.6 Existing objects that extend above a take-off climb surface should as far as practicable be removed except when, in the opinion of the Authority, an object is shielded by an existing immovable object, or after aeronautical study it is determined that the object would not adversely affect the safety or significantly affect the regularity of operations of aeroplanes.

Note. — Because of transverse slopes on a strip or clearway, in certain cases portions of the inner edge of the take-off climb surface may be below the corresponding elevation of the strip or clearway. It is not intended that the strip or clearway be graded to conform with the inner edge of the take-off climb surface, nor is it intended that terrain or objects which are above the take-off climb surface beyond the end of the strip or clearway, but below the level of the strip or clearway, be removed unless it is considered they may endanger aeroplanes. Similar considerations apply at the junction of a clearway and strip where differences in transverse slopes exist.

4.0 OBJECTS OUTSIDE THE OBSTACLE LIMITATION SURFACES

4.1 The Authority shall be consulted concerning proposed construction beyond the limits of the obstacle limitation surfaces that extend to a height of 150 m or more above ground elevation, in order to permit an aeronautical study of the effect of such a construction on the operation of aeroplanes.

4.2 Those objects referred to in 4.1 shall be regarded as obstacles, unless a special aeronautical study as required indicates that they do not constitute a hazard to aircraft operations.

Note. — This study may have regard to the nature of operations concerned and may distinguish between day and night operations.

5.0 OTHER OBJECTS

5.1 Objects which do not project through the approach surface but which would nevertheless adversely affect the optimum siting or performance of visual or non-visual aid should, as far as practicable, be removed.

5.2 Anything which may, in the opinion of the Authority after aeronautical study, endanger aeroplanes on the movement area or in the air within the limits of the inner horizontal and conical surfaces should be regarded as an obstacle and should be removed in so far as practicable.

Note. — In certain circumstances, objects that do not project above any of the surfaces identified in section 2.0 (Obstacle Limitation Surface) may constitute a hazard to aircraft, for example, where there are one or more isolated objects in the vicinity of an aerodrome.